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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,027	10/27/2003	Shih H. Chen	PO92291	3454
46103	7590	06/15/2005	EXAMINER	
HDSL 4331 STEVENS BATTLE LANE FAIRFAX, VA 22033			LE, DANG D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/693,027

Applicant(s)

CHEN, SHIH H.

Examiner

Dang D. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 12 is objected to because of the following informalities: replace "the support bridges" at last line with -- the radially extending arms --. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Horng et al. (6,724,120).

Regarding claim 1, Horng et al. shows all of the limitations of the claimed invention.

4. Claims 1, 3, and 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Horng et al. (6,441,531).

Regarding claims 1, 3, and 7, Horng et al. shows an improved silicon steel structure (Figures 8-10), comprising an interior ring (40), an exterior ring (42)

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concentrically arranged with the interior ring, a plurality of radially extending support bridges (for 43) interconnecting an exterior edge of the interior ring and an interior edge of the exterior ring, and a magnet absorbing surface (44) attached to an exterior edge of the exterior ring, and coils (43).

Regarding claims 5, 6, 9, and 10, it is noted that Horng et al. also shows a third silicon sheet inserted between the first and second silicon steel sheets and the third silicon sheet includes an inner ring, an outer ring concentrically arranged with the inner ring, and a plurality of support bridges interconnecting the inner and outer rings (Figures 8-10).

Regarding claim 8, it is noted that Horng et al. also shows each of the coils having a vertical thickness (bottom side in Figure 9) smaller than a height (second 44 from right side in Figure 9) of the magnetic absorbing surface (of the bottom sheet).

Regarding claim 11, it is noted that Horng et al. also shows each of the coils having a vertical thickness (bottom side) smaller than a total height (44 near 45 in Figure 9) of the magnetic absorbing surface and the thickness of the third silicon steel sheet (including first, second and third sheets).

5. Claims 1, 3, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Grudl (5,705,874).

Regarding claims 1, 3, and 7, Grudl shows an improved silicon steel structure (Figures 16 and 17), comprising an interior ring (46), an exterior ring (24.2) concentrically arranged with the interior ring, a plurality of radially extending support bridges (18) interconnecting an exterior edge of the interior ring and an interior edge of

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the exterior ring, and a magnet absorbing surface (22.1) attached to an exterior edge of the exterior ring, and coils (8).

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Horng (6,285,108).

Regarding claims 1 and 3, Horng shows an improved silicon steel structure (Figures 5-29), comprising an interior ring (around 30), an exterior ring (adjacent 211) concentrically arranged with the interior ring, a plurality of radially extending support bridges (21) interconnecting an exterior edge of the interior ring and an interior edge of the exterior ring, and a magnet absorbing surface (211) attached to an exterior edge of the exterior ring.

Regarding claims 2 and 4, it is noted Horng also shows all of the limitations of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng et al. (6,441,531) in view of Horng (6,285,108).

Regarding claim 12, Horng et al. shows a heat dissipating fan (preamble), comprising:

- a plurality of coil sets (Figures 8-10) each further comprises:

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- a stack of silicon steel sheet, comprising a plurality of radially extending arms (for 43) between a center and a periphery thereof;
- a magnetic absorbing surface (44) attached to a periphery of the stack and facing the rotor (not shown); and
- a plurality of coils (43) winding around the support bridges.

Horng et al. does not show a blade wheel and a magnet, mounted along an interior periphery of the blade wheel.

For the purpose of reducing heat, Horng shows a blade wheel (80, 84, Figures 28 and 29) and a magnet (85), mounted along an interior periphery of the blade wheel (80, 84).

Since Horng et al. and Horng are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a blade wheel and a magnet, mounted along an interior periphery of the blade wheel as taught by Horng for the purpose discussed above.

Regarding claims 13-17, it is noted that Horng also shows all of the limitations of the claimed invention including blades (84), shaft (81), and a cap to support the shaft (bearing not shown).

***Information on How to Contact USPTO***

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/13/05

A handwritten signature in black ink, appearing to read 'Dang D. Le', is written in a cursive style.

**DANG LE  
PRIMARY EXAMINER**